

**Remarks**

Claims 1-3, and 6-46 are pending. Claims 19-33 and 35-46 were previously withdrawn. Claims 1-3, 6-18 and 34 are rejected.

Information Disclosure Statement

Entries A59 and 60 in the returned Information Disclosure Statement (IDS) filed on September 22, 2005 were marked by the Examiner without the Examiner's initials or signature. Applicants respectfully request the Examiner to initial or otherwise sign off these two entries.

Rejections under 35 U.S.C. §102

Claims 1-3, and 6-13, 15-17 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/38546 (WO 38546).

Claim 1 defines a method for immobilizing an anti-thrombogenic material into a coating comprising a base coat layer posited on a surface of an implantable medical device within the mammalian body. The method requires (a) preparing a base coat mixture comprising a binding material, a grafting material, a photoinitiator, and a solvent; (b) applying the base coat mixture directly to the implantable medical device; (c) polymerizing the base coat mixture to form the base coat layer on the medical device by photopolymerization; (d) applying a formulation comprising the anti-thrombogenic material to the surface of the base coat layer; and (e) immobilizing the anti-thrombogenic material directly to chemically functional groups within the base coat layer on the surface of the medical device. **The anti-thrombogenic material is selected from glycosaminoglycans, superoxide dismutase mimetic (SODm), or combinations thereof.**

WO 38546, however, describes immobilizing a general therapeutic, diagnostic or hydrophilic agent onto a coating using a binding material. **WO 38546 does not require an anti-thrombogenic material that can be one of glycosaminoglycans, superoxide dismutase mimetic (SODm), or combinations thereof.** Therefore, claim 1 is patentably allowable over WO 38546 under 35 U.S.C. 102(b). Claims 2, 3, and 6-12 depend from claim 1 and are patentably allowable over WO 38546 under 35 U.S.C. 102(b) for at least the same reason.

In addition, claim 6 requires the binding material defined therein to include cinnamaldehyde. WO 38546 does not describe this feature. Therefore, aside from its dependency from claim 1, claim 6 is additionally allowable over WO 38546 under 35 U.S.C. 102(b). Similarly, claim 8 requires the grafting material defined therein to include polyurethane acrylate. WO 38546 does not describe this feature. Therefore, aside from its dependency from claim 1, claim 8 is additionally allowable over WO 38546 under 35 U.S.C. 102(b).

#### **Rejections under 35 U.S.C. 103**

Claims 1-3, 6-18 and 34 are rejected under 35 U.S.C. 103(a) as being obvious over Wang in view of U.S. Patent No. 5,620,738 to Fan et al. ("Fan").

Wang describes a method of coating a polymeric substrate by exposing the substrate with a photo initiator, generating reactive radical sites on the surface of the substrate, contacting the substrate with a composition comprising a monomer, and grafting the monomers onto the substrate by forming covalent bonding at reactive radical sites on the substrate surface (col. 3, lines 52-64; col. 4, line 57 through col. 6, line 47).

**Wang does not describe or teach a binding material,** in addition to grafting monomer

materials, that includes one of polyaziridine resin compounds, polycarbodiimide resin compounds, aldehyde compounds, oxirane compounds, acetoacetoxy compounds, and isocyanate compounds. Further, **Wang does not teach a method that requires an anti-thrombogenic material selected from glycosaminoglycans, superoxide dismutase mimetic (SODm), or combinations thereof.**

Fan describes using a binder polymer with aldehyde or isocyanate functional groups to attach lubricious acrylic-based polymers to stents. **Fan does not describe or teach an anti-thrombogenic material selected from glycosaminoglycans, superoxide dismutase mimetic (SODm), or combinations thereof.**

Claims 2, 3 and 6-14 depend from claim 1, which **requires an anti-thrombogenic material selected from glycosaminoglycans, superoxide dismutase mimetic (SODm), or combinations thereof.** Claims 16-18 depend from claim 15, which defines a method that also recites **an anti-thrombogenic material selected from glycosaminoglycans, superoxide dismutase mimetic (SODm), or combinations thereof.** As discussed above, Wang and Fan, individually or combined, fail to teach **an anti-thrombogenic material selected from glycosaminoglycans, superoxide dismutase mimetic (SODm), or combinations thereof.** Therefore, claims 1-3, 6-18 and 34 are patentably allowable over Wang in view of Fan under 35 U.S.C. 103(a).

Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being obvious over WO 38546.

As the above discussion shows, **both claim 14 and 18 requires an anti-thrombogenic material selected from glycosaminoglycans, superoxide dismutase mimetic (SODm), or combinations thereof,** and WO 38546 fails to describe or teach

this element. Claims 14 and 18 are therefore patentably allowable over WO 38546 under 35 U.S.C. 103(a).

The undersigned authorizes the examiner to charge any fees that may be required or credit of any overpayment to be made to Deposit Account No. 07-1850.

**CONCLUSION**

Withdrawal of the rejection and allowance of the claims are respectfully requested.

**If the Examiner has any suggestions or amendments to the claims to place the claims**

**in condition for allowance, applicant would prefer a telephone call to the**

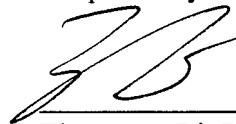
**undersigned attorney for approval of an Examiner's amendment.** If the Examiner

has any questions or concerns, the Examiner is invited to telephone the undersigned

attorney at (415) 393-9885.

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Respectfully submitted,



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